

FORTHCOMING PUBLICATIONS

December 2004, Vol. 78, No. 12

Astrophysics, Atmospheric & Space Physics

$O^+ - O$ and $O^+ - O^+$ collision frequencies in the auroral ionosphere

MAZEN S ABU-ISSA, AMIN A LEGHROUZ, ELIAS I ELIAS AND IMAD A BARGHOUTHI

OI 6300 Å nightglow emission at Calcutta and its verification by Barbier's equation in terms of solar flare index

S K MIDYA, R CHATTOPADHYAY AND CHANDRAMADHAB PAL

General Physics

Neural network representation for electron and positron collisions with sodium and potassium atoms

SALAH YASEEN EL-BAKRY AND MAHMOUD YASEEN EL-BAKRY

Speeds of sound and isentropic compressibilities of binary mixtures containing dipropylene glycol monobutyl ether with n-alkanols at 298.15 K

AMALENDU PAL AND ANIL KUMAR

Ultrasonic study of intermolecular association through hydrogen bonding in aqueous solutions of D – mannitol

M SETHU RAMAN AND G AMIRTHAGANESAN

ANFIS modelling for theoretical evaluation of ultrasonic velocities in binary liquid mixtures

S B KALYANA RAMAN AND K T ARULMOZHII

A comparative dielectric study of poly (vinyl pyrrolidone) in unlike hydroxyl group number containing polar solvents

R J SENGWA, ABHILASHA, S C MEHROTRA AND B R SHARMA

Semiclassical theory for thermodynamics of molecular fluid mixtures

SHANKAR S KARKI AND SURESH K SINHA

Radiation characteristics of two-element array

K K VERMA AND K R SONI

Optics & Spectroscopy

Infrared spectra of charge transfer complexes of bis (N-ethylsalicylaldiminato) Cu^{II}

J H PRAJAPATI, S G PATEL AND A T OZA

FTIR and Mössbauer spectroscopic studies of archaeological potteries from Nathikudi, Tamil Nadu

R VENKATACHALAPATHY, D GOURNIS, C MANOHARAN, S DHANAPANDIAN
AND K DEENADAYALAN

Overtone spectra of phenol derivatives

GARIMA TRIPATHI, VINLET KUMAR RAI AND S B RAI

Spectral and normal coordinate analysis on the molecule of bis (thiourea) cadmium chloride single crystal

V JOSEPH, V SANTHANAM AND D ANCEILA

Plasma Physics

Transverse self-focusing and filamentation of a laser beam in a collisional magnetoplasma

GHANSHYAM AND A K SHARMA

Notes

Electronic spectrum of octaazacubane (N_8)

R S PRASAD AND K KUMAR

On temperature T_{01} for molecular hydrogen

SURESH CHANDRA

Radiation characteristics of four-element circular array of equilateral triangular patch microstrip antenna in plasma medium

K K VERMA AND K R SONI

Book Review